

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025531**Date Inspected:** 27-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai**CWI Name:** Tian Lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector R. Hernandez was present during the time noted above and conducted observations relative to the work being performed.

The QA Inspector randomly observed the following work in progress:

Bay Number 1

Performed verification VT for the component(s) identified as OBG Barrier Rails for components listed as E2-SB1-056, E2-SB1C-007, & E2-SB1C-012, This QA inspector signed green tag #15094.

ZPMC personnel heat straightening Orthotropic Box Girder (OBG) traveler rail components identified as 20TR2-032. Distortion appeared to be caused by welding. ZPMC Quality Control (QC) inspector identified as Mr. Tian Lei was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) no. HSRB-362.

This QA inspector performed VT of 100% of the area previously visually inspected and accepted by ZPMC Quality Control personnel. All components were as listed on NWIT notification no.(s) 07943. The member(s) is/are identified as OBG Sub Assembly components. The sub-assembly designations reviewed are as follows:

1. SA3098B (4)
2. SA3098D (2)

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3. SA3098F (3)
4. SA3098A (5)
5. SA3098G (2)
6. SA3343A (3)
7. SA3343B (3)
8. SA3050A
9. SA3050B
10. SA3050C
11. SA3050D
12. SA3050E
13. SA3050F

### Bay Number 2

This inspector observed ZPMC QC personnel performing MT inspection on AP3032-001. The following weld numbers were observed and found to contain cracks. The number in parenthesis designates the number of cracks found in the corresponding weld no.:

374(2) 329(3) 464(1) 419(2) 885(1) 553(2) 740(1)

881(1) 835(2) 787(1) 691(1) 551(1) 642(1) 550(3)

460(1) 415(1) 325(1) 459(2) 784(1) 832(1) 375(2)

421(1) 328(1)

### Bay Number 3

SMAW welding of complete joint penetration welds located on Edge Plate component identified as EP3017-001 for weld no. 043, 044, 067 & 068. Welder is identified as welder no. 050977. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2231-ESAB.

FCAW welding of complete joint penetration welds located on Architectural Housing component identified as AH3150A for weld no. 062, 063, 243, 241, & 247. Welder is identified as welder no. 037996. The welding variables recorded by ZPMC QC identified as Tian Lei appeared to comply with applicable WPS(s) WPS-B-P-2213-TC-U4b.

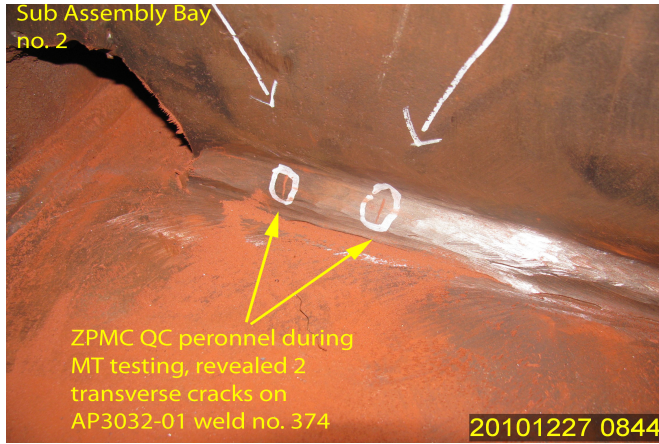
Unless otherwise noted above all items observed on this day appeared to be in general compliance with the applicable contract documents.

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## Summary of Conversations:

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 1500-0042-02372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Rene	Quality Assurance Inspector
<b>Reviewed By:</b>	Hall,Steven	QA Reviewer

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